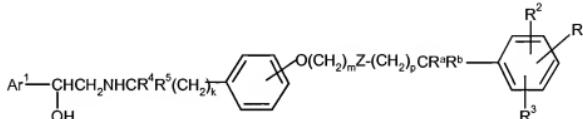


Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Original) A compound of formula (I)



or a salt, solvate, or physiologically functional derivative thereof, wherein:

k is an integer of from 1 to 3;

m is an integer of from 2 to 4;

p is an integer of from 0 to 3;

Z is O or CH₂-

R¹ is selected from hydrogen, C₁₋₆alkyl, hydroxy, C₁₋₆alkoxy, cyano, nitro, halo, C₁₋₆haloalkyl, XCO₂R⁸, -X(C(O)NR⁷R⁸, -XNR⁶C(O)R⁷, -XNR⁶C(O)NR⁷R⁸, -XNR⁶C(O)NC(O)NR⁷R⁸, -XNR⁶SO₂R⁷, -XSO₂NR⁹R¹⁰, XSR⁶, XSOR⁶, XSO₂R⁶, XNR⁶SO₂NR⁷R⁸, XNR⁶SO₂NR⁷COOR⁷, -XNR⁷R⁸, -XNR⁶C(O)OR⁷, or R¹ is selected from -X-aryl, -X-hetaryl, or -X-(aryloxy), each optionally substituted by 1 or 2 groups independently selected from hydroxy, C₁₋₆alkoxy, halo, C₁₋₆alkyl, C₁₋₆haloalkyl, -NR⁶C(O)R⁷, SR⁶, SOR⁶, -SO₂R⁶, -SO₂NR⁹R¹⁰, -CO₂R⁸, -N R⁷R⁸, or hetaryl optionally substituted by 1 or 2 groups independently selected from hydroxy, C₁₋₆alkoxy, halo, C₁₋₆alkyl, or C₁₋₆haloalkyl;

X is -(CH₂)_q- or C₂₋₆ alkenylene;

q is an integer from 0 to 6;

R⁶ and R⁷ are independently selected from hydrogen, C₁₋₆alkyl, C₃₋₇cycloalkyl, aryl, hetaryl, hetaryl(C₁₋₆alkyl)- and aryl(C₁₋₆alkyl)- and R⁶ and R⁷ are each independently optionally substituted by 1 or 2 groups independently selected from halo, C₁₋₆alkyl, C₃₋₇ cycloalkyl, C₁₋₆ alkoxy, C₁₋₆haloalkyl, -NHC(O)(C₁₋₆alkyl), -SO₂(C₁₋₆alkyl), -SO₂(aryl), -CO₂H, and -CO₂(C₁₋₄alkyl), -NH₂, -NH(C₁₋₆alkyl), aryl(C₁₋₆alkyl)-, aryl(C₂₋₆alkenyl)-, aryl(C₂₋₆alkynyl)-, hetaryl(C₁₋₆alkyl)-, -NHSO₂aryl, -NH(hetarylC₁₋₆alkyl), -NHSO₂hetaryl, -NHSO₂(C₁₋₆alkyl), -NHC(O)aryl, or -NHC(O)hetaryl:

R⁸ is selected from hydrogen, C₁₋₆alkyl and C₃₋₇ cycloalkyl;

or R⁷ and R⁸, together with the nitrogen atom to which they are bonded, form a 5-, 6- or 7- membered nitrogen – containing ring;

R⁹ and R¹⁰ are independently selected from hydrogen, C₁₋₆alkyl, C₃₋₇cycloalkyl, aryl, hetaryl, hetaryl(C₁₋₆alkyl)- and aryl(C₁₋₆alkyl)-, or R⁹ and R¹⁰, together with the nitrogen to which they are bonded, form a 5-, 6-, or 7- membered nitrogen containing ring;

and R⁹ and R¹⁰ are each optionally substituted by one or two groups independently selected from halo, C₁₋₆alkyl, and C₃₋₇cycloalkyl, C₁₋₆haloalkyl;

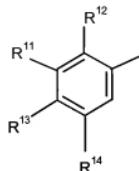
R² is selected from hydrogen, hydroxy, C₁₋₆alkyl, C₁₋₆alkoxy, halo, aryl, aryl(C₁₋₆alkyl)-, C₁₋₆haloalkoxy, and C₁₋₆haloalkyl;

R³ is selected from hydrogen, hydroxy, C₁₋₆alkyl, C₁₋₆alkoxy, halo, aryl, aryl(C₁₋₆alkyl)-, C₁₋₆haloalkoxy, and C₁₋₆haloalkyl;

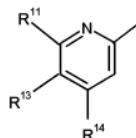
R^a and R^b are independently selected from hydrogen and C₁₋₄ alkyl.

R⁴ and R⁵ are independently selected from hydrogen and C₁₋₄ alkyl with the proviso that the total number of carbon atoms in R⁴ and R⁵ is not more than 4; and

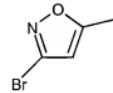
Ar¹ is a group selected from



(a)

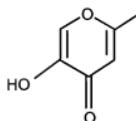


(b)



(c)

and



(d)

wherein R¹¹ represents halogen, -(CH₂)_nOR¹⁵, -NR¹⁵C(O)R¹⁶, -NR¹⁵SO₂R¹⁶, -SO₂NR¹⁵R¹⁶, -NR¹⁵R¹⁶, -OC(O)R¹⁷ or OC(O)NR¹⁵R¹⁶, and R¹² represents hydrogen, halogen or C₁₋₄ alkyl;

or R¹¹ represents -NHR¹⁸ and R¹² and -NHR¹⁸ together form a 5- or 6-membered heterocyclic ring;

R¹³ represents hydrogen, halogen, -OR¹⁵ or -NR¹⁵R¹⁶;

R¹⁴ represents hydrogen, halogen, haloC₁₋₄ alkyl, -OR¹⁵, -NR¹⁵R¹⁶, -OC(O)R¹⁷ or OC(O)NR¹⁵R¹⁶;

R^{15} and R^{16} each independently represents hydrogen or C₁₋₄ alkyl, or in the groups

$-NR^{15}R^{16}$, $-SO_2NR^{15}R^{16}$ and $-OC(O)NR^{15}R^{16}$, R^{15} and R^{16} independently represent hydrogen or C₁₋₄ alkyl or together with the nitrogen atom to which they are attached form a 5-, 6- or 7-membered nitrogen-containing ring.

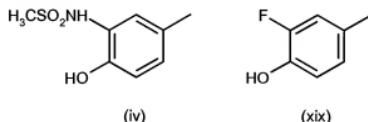
R^{17} represents an aryl group which may be unsubstituted or substituted by one or more substituents selected from halogen, C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy or halo C₁₋₄ alkyl; and

n is zero or an integer from 1 to 4:

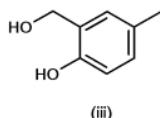
provided that in the group (a), when R^{11} represents $-(CH_2)_nOR^{15}$ and n is 1, R^{13} is not OH.

2. (Original) A compound according to claim 1 wherein Ar¹ is selected from group (a) or group (b), as defined in claim 1.

3. (Original) A compound of formula (I) according to claim 2 wherein group (a) is selected from a group of formula (iv) or (xix):



4. (Original) A compound of formula (I) according to claim 2 wherein group (b) is a group of formula (iii):



any of claims 1-4 wherein R¹ is selected from hydrogen, C₁₋₄alkyl, hydroxy,

cyano, C₁-alkoxy, halo, XCO₂R⁸, XNR⁶COR⁷, XCONR⁷R⁸, -NR⁶C(O)NR⁷R⁸, XSOR⁶, XNR⁶SO₂NR⁷R⁸, XNR⁶SO₂NR⁷CO₂R⁷ and -NR⁶SO₂R⁷
wherein R⁶ and R⁷ are as defined above.

6. (Original) A compound of formula (I) according to claim 5 wherein R¹ is selected from XC(O)NR⁷R⁸ or hydrogen.

7. (Currently Amended) A compound of formula (I) according to claim 1 any of claims 1-6 wherein R² and R³ each represent hydrogen.

8. (Currently Amended) A compound of formula (I) according to claim 1 any of claims 1-7 wherein R⁴ and R⁵ each represent hydrogen.

9. (Currently Amended) A compound of formula (I) according to claim 1 any of claims 1-8 wherein R^a and R^b each represent hydrogen.

10. (Currently Amended) A compound of formula (I) according to claim 1 which is selected from the group consisting of:

3-[{2-(4-{2-[(2R)-2-hydroxy-2-(4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl)amino]ethyl}phenoxy]ethoxy]methyl]benzamide;
N-{2-hydroxy-5-[(1R)-1-hydroxy-2-({2-[4-(4-phenylbutoxy)phenyl]ethyl}amino)ethyl]phenyl}methanesulfonamide;
N-(5-{(1R)-2-[(2-(4-[2-(benzyloxy)ethoxy]phenyl)ethyl)amino]-1-hydroxyethyl}-2-hydroxyphenyl)methanesulfonamide;
3-({2-[4-(2-[(2R)-2-(3-fluoro-4-hydroxyphenyl)-2-hydroxyethyl]amino]ethyl}phenoxy)ethoxy]methyl)benzamide;
4-{(1R)-2-[(2-{4-[2-(benzyloxy)ethoxy]phenyl}ethyl)amino]-1-hydroxyethyl}-2-fluorophenol;
2-fluoro-4-[(1R)-1-hydroxy-2-({2-[4-(4-phenylbutoxy)phenyl]ethyl}amino)ethyl]phenol;
3-[(2-{4-[2-(2-hydroxy-2-[5-hydroxy-6-(hydroxymethyl)pyridin-2-yl]ethyl}amino)ethyl}phenoxy)ethoxy]methyl]benzamide;

6-{[2-(4-[2-(benzyloxy)ethoxy]phenyl)ethyl]amino}-1-hydroxyethyl]-2-(hydroxymethyl)pyridin-3-ol;
2-(hydroxymethyl)-6-[1-hydroxy-2-({2-[4-(4-phenylbutoxy)phenyl]ethyl}amino)ethyl]pyridin-3-ol;

and salts thereof, solvates thereof and physiologically functional derivatives thereof.

11. (Currently Amended) A method for the prophylaxis or treatment of a clinical condition in a mammal, such as a human, for which a selective β_2 -adrenoreceptor agonist is indicated, which comprises administering administration of a therapeutically effective amount of a compound of formula (I), according to claim 1 any of claims 1-10, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof.

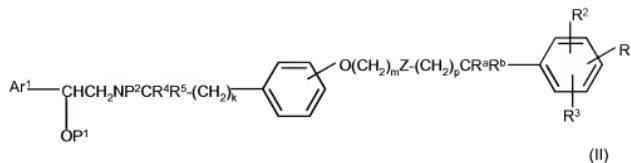
12-13 (Canceled)

14. (Currently Amended) A pharmaceutical formulation comprising a compound of formula (I), according to claim 1 any of claims 1-10, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof, and a pharmaceutically acceptable carrier or excipient, and optionally one or more other therapeutic ingredients.

15. (Canceled)

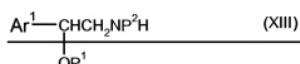
16. (Currently Amended) A process for the preparation of a compound of formula (I), according to claim 1 any of claims 1-10, or a salt, solvate, or physiologically functional derivative thereof, which comprises:

(a) deprotection of deprotecting a protected intermediate, for example of formula (II):

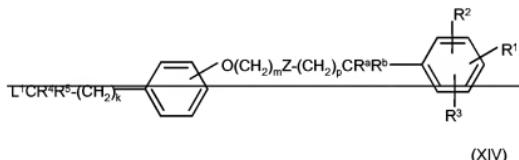


or a salt or solvate thereof, wherein Ar^1 , R^1 , R^2 , R^3 , R^a , R^b , R^4 , R^5 , Z , k , m , and p are as defined for the compounds of formula (I), and P^1 and P^2 are each independently either hydrogen or a protecting group provided that at least one of P^1 and P^2 is a protecting group; or

(b) alkylation of an amine of formula (XIII)

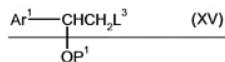


wherein Ar^1 is as defined above for compounds of formula (I) and P^1 and P^2 are each independently either hydrogen or a protecting group, with a compound of formula (XIV):

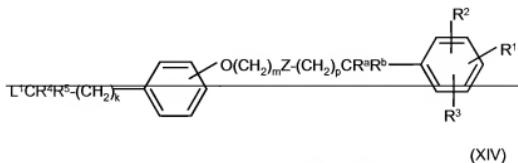


wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^a , R^b , Z , m , and p are as defined for the compound of formula (I) and L^1 is a leaving group;

(c) reacting a compound of formula (XV):

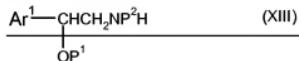


wherein P^4 and Ar^4 are as hereinbefore defined and L^3 is a leaving group, with an amine of formula (XVI):



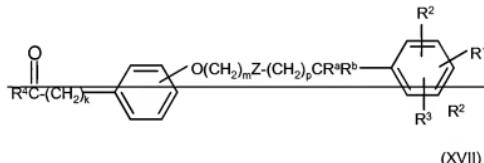
wherein R^4 , R^2 , R^3 , R^4 , R^5 , R^a , R^b , Z , k , m , p and P^2 are as hereinbefore defined; or

d) reacting a compound of formula (XIII):



as hereinbefore defined,

with a compound of formula (XVII);



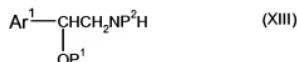
under conditions suitable to effect reductive amination.

wherein said deprotecting step is optionally followed by one or more of the following steps in any order selected from the group consisting of in any order:

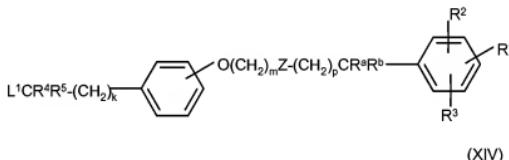
- (i) optional removal of removing any protecting groups;
- (ii) optional separation of separating an enantiomer from a mixture of enantiomers; and
- (iii) optional conversion of converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.

17. (New) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises:

alkylating an amine of formula (XIII)



wherein Ar^1 is as defined above for compounds of formula (I) and P^1 and P^2 are each independently either hydrogen or a protecting group, with a compound of formula (XIV):



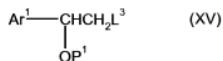
wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^a , R^b , Z , m , and p are as defined for the compound of formula (I) and L^1 is a leaving group;

wherein said alkylating step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

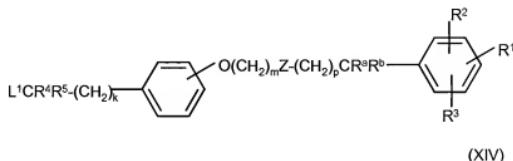
- (i) removing any protecting groups;
- (ii) separating an enantiomer from a mixture of enantiomers; and
- (iii) converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.

18. (New) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises:

reacting a compound of formula (XV):



wherein P¹ is either hydrogen or a protecting group and Ar¹ are as hereinbefore defined and L³ is a leaving group, with an amine of formula (XVI):



wherein R¹, R², R³, R⁴, R⁵, R^a, R^b, Z k, m, p and P² are as hereinbefore defined, and L¹ is a leaving group;

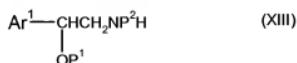
wherein said reacting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

- (i) removing any protecting groups;
- (ii) separating an enantiomer from a mixture of enantiomers; and
- (iii) converting the product to a corresponding salt, solvate,

or physiologically functional derivative thereof.

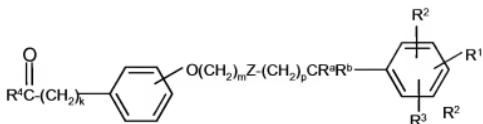
19. (New) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises:

reacting a compound of formula (XIII):



as hereinbefore defined, and wherein P¹ and P² are each independently either hydrogen or a protecting group provided that at least one of P¹ and P² is a protecting group,

with a compound of formula (XVII):



(XVII)

under conditions suitable to effect reductive amination;

wherein said reacting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

- (i) removing any protecting groups;
- (ii) separating an enantiomer from a mixture of enantiomers; and
- (iii) converting the product to a corresponding salt, solvate,

or physiologically functional derivative thereof.

20. (New) The method according to Claim 11, wherein said mammal is a human.